

**DEQ – Air Quality Division
SUMMARY OF NEGOTIATED RULEMAKING MEETING
DAIRY PERMITTING
DOCKET 58-0101-0502
April 12, 2005**

PARTICIPANTS

Bauer, Martin – DEQ
Carlson, Rich – Idaho Rural Council
Delorey, Dean – Amalgamated Sugar
Eddie, Bill – Advocates for the West
Hayes, Justin – Idaho Conservation League
Kronberg, Lisa – DEQ–Deputy Attorney General
McClure, Ken – Givens, Pursley
McLean, Lauren – Idaho Conservation League
Naerebout, Bob – Idaho Dairymen's Association
Olmstead, Brent – Milk Producers of Idaho
Patten, Marv – Idaho Dept. of Agriculture
Quesnell, Mike – Idaho Dairymen's Association
Simon, Mike – DEQ
Smith, Ed – Citizen
Stouder, Bill – Idaho Dairymen's Association
Thompson, Matthew – AgTec
Heitman, Phyllis – DEQ (Admin Support)

INTRODUCTION – REASON FOR RULEMAKING

Martin Bauer said the participants present are probably already aware of the reason for this rulemaking, namely the Idaho Conservation League (ICL) - K & W Dairy lawsuit, the Court's decision and subsequent ammonia emission factor negotiations between ICL and the Independent Dairy Environmental Action League (IDEAL). Copies of relevant documents were distributed and are attached. Schedule-wise, negotiation of the proposed rule must be completed by the third week in July, 2005 in order to meet timelines for public comment, DEQ Board approval and submittal to the 2006 Legislature.

Mr. Bauer stated that the Court's decision created some issues for DEQ. Following the Court's decision, the Legislature passed House Bill 230 (HB230) requiring DEQ to adopt state rules that conform to the Clean Air Act (CAA). Trailer Senate Bill 1128 (SB1128) revised language in HB230 to ensure the required rules would be EPA-approvable. Requirements in those bills will be incorporated into the air quality rules through negotiated rulemaking, which will be announced in the May, 2005 Administrative Bulletin. A proposed rule will go to the 2006 Legislature assuming negotiations are completed on time. Revisions will be submitted to EPA in the spring, 2006; EPA most likely will take one to two years to approve and incorporate into the State Implementation Plan (SIP).

Ken McClure asked if this rule could be presented as a temporary rule. Lisa Kronberg said there might be some flexibility in meeting the requirements of a temporary rule; however, Mr. Bauer said a temporary rule change would not expedite EPA approval. The rule change would still be required to go through the proposed rule process, Board approval and submittal to the 2006 Legislature before going to EPA. In addition, DEQ would be required to seek Governor's Office approval to change the rulemaking from proposed to temporary as well as re-notice the rulemaking to the public.

RULE STRUCTURE

Ms. Kronberg discussed the three possible options for structuring the rule and the advantages/disadvantages of each.

Permit by Rule (PBR). Currently DEQ's PBR program for rock crushers, located at rule Sections 790-799, allows a facility to register as a PBR instead of applying for a permit to construct. Registrants pay a \$250 fee to cover a portion of DEQ's processing costs. The PBR process has worked well for both DEQ and industry. As part of the negotiated rulemaking, DEQ and industry developed the Best Management Practices (BMPs) that were included in the rule.

General Permit. Title V program rule Section 335 describes a general permit. In the case of dairies, the permit for each type of facility would have specific conditions and BMPs appropriate for the number of cows at the facility. If a new facility begins operation, the source would ask DEQ for authority to operate under a general permit. Ms. Kronberg envisioned there would be general permit for each of the facility types. Mr. Bauer said that each general permit would be assessed a fee. In addition, language will be needed to allow for a general permit.

General Rule. In this situation the BMPs would be written into the rule and a permit would not be required. The source would comply with the rule. No fees would be assessed. The advantage to the general rule is it takes away a permit action. However, any facility could request a permit to construct in lieu of operating under a general rule.

A fourth option could be a situation where a facility does not like the BMPs that were established in the general rule and wants to utilize a different option. In this case the facility could instead ask for a permit.

Bob Naerebout asked which option would apply if the Committee developed a process where each BMP was rated numerically and a facility would be required to reach a certain value of BMPs. Mr. Bauer said language could be added to any of the rule options to make that approach work. The general permit would provide the most flexibility while the PBR and general rule would provide the most consistency. If the general permit was revised in the future, a facility holding a previously issued general permit would be required to be re-assigned to the new permit.

In response to a question about how sources would have access to BMPs developed in the future, Mr. Bauer said the rule would need language to enable use of new technology. Conversely, if a BMP was listed in the rule and found to be ineffective, a rulemaking would have to be convened to delete that BMP. When EPA develops a dairy regulation, DEQ will have to make certain the rule developed here complies with EPA requirements.

There was discussion about whether public input would be required if a facility modified its operation or if an additional facility began operation in the area. Mr. McClure said that if BMPs were given a score, a source should be able to use any combination of BMPs to reach the correct rating without public input or appeal. Justin Hayes offered that rarely is public interest not served by having public awareness and understanding of what is happening in the community. ICL would always advocate on behalf of the public being aware of the process even if it is only at a level of information sharing.

Ed Smith asked how a scoring system of BMPs would fit into decisions on siting a new dairy. These rules would not overrule any decision made by the state CAFO siting team. DEQ does not have authority to make decisions on siting. Input from the CAFO team is provided to the local planning authorities. Part of that input could pertain to air considerations, but the primary focus is water-related issues. Mr. Smith said he thinks the siting team should also look at degradation of air quality.

Ms. Kronberg said one important factor in order to have flexibility is to keep good records. DEQ has developed general forms and checklists to make the process easy. Mr. McClure said he hopes the goal of the rule is not only to make it easy to comply and inspect to confirm compliance but also, to the degree possible, avoid compliance based upon record keeping requirements.

Mr. Patten asked if a mechanism needs to be developed to ensure DEQ is comfortable that the dairyman is operating within his BMPs. In addition how is the dairyman going to be confident they are in compliance with the provisions of the permit. Ms. Kronberg said inspectors would have a facility-specific inspection checklist to take into the field. Those records would be available to the public through the public records request process. Additionally, the dairyman would be required to show documentation to the inspector about what BMPs have been done. Mr. Bauer said DEQ does not want to add additional reporting. Mr. McClure suggested that making BMPs part of the dairy design could ensure compliance.

Mr. Bauer summarized the difference between a PBR and a general permit. A PBR is actually written into the rule and would include BMPs, the points designated for each BMP, and the method of compliance. The facility would agree to operate according to the rule and register prior to operation. A general permit would be a document separate from the rule. A permit document would be developed for each type of source (dry lot, flush, etc) and specific conditions would appear in each permit. The difference between the PBR and the general permit is that if a facility wants to change a specific permit issued to a facility, it does not have to change the rule. However, if you want to change the PBR you have to go through a negotiated rulemaking and the Legislature. They would be identical in content; just the method of making changes would be different.

BEST MANAGEMENT PRACTICES

Mr. Bauer distributed the "San Joaquin Unified Air Pollution Control District Preliminary Draft Staff Report" (see attached). The committee reviewed the BMP's on pages 14-24 and discussed the advantages/disadvantages of each.

Bedding

- Use straw, wheat, barley; Treasure Valley also uses mint
- Composting and bedding are two different processes
- Partial composting – dry enough to use and stockpile to use for bedding
- Need sufficient carbon to tie up nitrogen
- Use of carbon amendment and the correct mixture, could have higher point value
- Use of sand would also be a BMP because it dries manure much faster
- Climatic conditions affect what BMP to use
- Composting is definitely a BMP if you have adequate carbon
- Bedding is also a BMP

Biofilters/Wet Scrubbers

- Rarely used at Idaho's facilities
- Can use other methods and accomplish same thing
- May not be cost effective
- Maintain as potential BMP; could be an option

Dietary Methods

- Direct equation between how many pounds of milk to be produced and the amount of protein
- National study says that if dairy producers would reduce protein content in ration by 1%, 66,000 tons of ammonia would be eliminated
- Producer would document what the protein content of the feed is rather than describe exactly what was feed
- Idaho has potential to have cheap protein
- Point-wise: if it is status quo why should it have high points; it may not be status quo part of the year. If you take the best practices of the best dairymen, that facility should not have to change a thing in order to comply with the permit
- From DEQ's standpoint, simplify to one set of points, so where the advantage is large for different times of the year or different processes, then we should have a graded number. Where you have less than half or a third of people using their full nitrogen content, then they do not get any credit.
- Protein level would not be confidential business information; what a facility feeds and what mix would not be
- Dairymen have nutrient plans
- Need to generate documentation on how dietary BMP would be written
- This would be a BMP; need some documentation in order to know how would we write it up

Moisture Reduction

- Separation, screw press, filters, dragging, harrowing are used
- When you are drying, are you emitting more ammonia?
- Most flush systems use separation, most have mechanical or gravity separation
- Incentive to switch from wet system to a dry system because you would get out of permitting; this could be too simplistic
- Fugitive sources at a dairy are mainly roads; not a big issue
- This would be a BMP

Biofiltration

Composting

- Pasturized milk ordinances – national program by FDA for Grade A milk
- Corral and free stall conditions must be met – amount of manure, type of bedding
- Only Grade A facilities would be included in this program
- Does PMO have BMPs that could be included with these BMPs? Link to PMO on Dept. of Ag web page; DEQ needs to review PMO program
- Compost with the correct carbon and nitrogen mixes all the way to the end you might get more points and less for just drying to get into a usable product in the bedding
- Daily wind rowing might give you more points because it is handled each day
- Composting may have more than one BMP number
- Wisconsin, California, Pennsylvania have looked at
- This would be a BMP

Flush System

- In Idaho, less than 10 flush dairies
- This would be a BMP

Pelletizing

- Not used at dairies
- This would not be a BMP

Solid Separation

- Not used often in Idaho
- Separation is used, but not as described in report
- Used to control odor and to land apply
- Mechanical dewatering, screw presses, gravity system – maintenance of system is a factor
- Which process is used depends on percentage control
- Different efficiencies for maintenance may have different points
- Remove solids to take food source away from the biology and emissions are reduced
- This would be a BMP

Extruder/Liquefaction

- Similar to solid separation

Additives – Microbial Additives

- Added to lagoons
- Changes the pH
- Alum (salt) additives would bind the NH₃; what effect on nutrient management
- Not much data on degree of effectiveness
- May be BMPs

Aerobic/Aerated Lagoons

- May be effective in a digester component
- Not aware of any fully aerated lagoons in Idaho
- Numerous aerated systems in past, not being used now
- Need adequate oxygen to keep bacteria alive
- This could be a component of a BMP

Digester Systems

- Several under construction
- May not control as much ammonia as previously thought
- Digester could need a PTC, based on emission level
- Maintain on list as a potential BMP

Circulators/Photosynthetic Lagoons/Facultative Lagoons

- Bacteria use light to get energy but control sulfur; unsure about ammonia
- Salt level adversely affects process
- Takes time to re-establish right mix to work efficiently
- May be a potential BMP

Lagoon Covers

- Proven technology
- Mosquito issues due to liquid on top of cover
- Lagoon size is a factor also; may not be feasible
- Covers last about four years; tearing due to weather and cleaning is a problem
- Expensive solution
- Maintain as potential BMP

Land Injection

- Form of land application
- Several systems in use
- Injected under soil
- Need land or certain types of crops to apply to
- Maintain as potential BMP

Reciprocating Wetlands

- Not a viable BMP

Subsurface Drip Irrigation

- Do not think this is in use in Idaho
- System is 18 inches in ground; high maintenance
- Needs to be filtered
- Not a viable BMP

Trapping Nitrogen and Phosphorous in Algae

- Do not have much information; may be some available from Colorado
- Maintain as potential BMP

Other Types of Potential BMPs

- Vacuuming: used in conjunction with some other system; frequency of removal is factor
- Gasification:
 - used a lot in wood industry – sawdust, wood chips – to supply energy
 - similar to combustion process
 - heat drives the chemistry; needs a balance of air
 - material feeds from the bottom
 - material breaks down into carbon monoxide (majority), hydrogen, and hydrogen gas
 - emission comes out at 1600°F; CO₂, H₂O, nitrogen gas
 - ash is the only waste - contains sulfur, phosphorous, potassium; used to manufacture fertilizer
 - uniformity of fuel source could be an issue
 - uses for emitted hot air
 - need to work through cost issues; for a 4,000 head dairy, may cost \$500,000
 - nutrient management will be driving force in making gasification viable, not air quality
 - only maintenance is cleaning the auger
 - AgTec has applied for DOE/USDA biomass grant to build a system
- Land application – drag - drop tubes
- Flood irrigation
- Location/distance of receptors: consideration of buffer and health impacts to receptor

The question was asked whether a mechanism could be developed by which a facility could use a BMP that is not on the list. Mr. Bauer answered there needs to be process where a source would propose something new and innovative as long as it is presented with documentation and justification why it would be a viable BMP.

SUBMITTALS/APPROVALS AND COMPLIANCE

Mr. Bauer proposed that the remaining two agenda items (submittals/approvals and compliance) be postponed until the committee decides on a rule structure. As explanation, submittals/approvals would entail what would need to be submitted in order to obtain an approval and what form that approval would take. Documents submitted to DEQ go through a determination of whether they are confidential or not, based on trade secrets or confidential business information (CBI). This program should be designed in such a way to eliminate CBI submitted to DEQ.

DISCUSSION

Mr. McClure asked if the members are not here to get a PTC by a general permit or a PBR, why are they here. Mr. Bauer said this rulemaking is to establish BMPs that would be implemented through some sort of a rule: general rule, general permit, permit by rule. Mr. McClure said he assumed the rulemaking was to do BMPs under the authority of a PTC and that if a facility adopted from the menu of BMPs that it could comply with the PTC requirements in a permit by rule or a general permit. He added he was not sure where the authority comes from if not from there. Mr. Bauer said one option is to go through a general rule or PBR. Mr. McClure said if DEQ's authority does not come through that avenue, where does it come through for DEQ to adopt BMPs for the dairies.

Ms. Kronberg said that goes back to the Section 39-105 that says DEQ can promulgate rules to establish a system to safeguard air quality and if the committee decides to do it like an NSPS rule, that would be its authority and take it completely out of permitting. Mr. McClure said he thinks the group will be looking much more closely at permitting than at Section 39-105 and it is what he expected. He added that when he said they were in the box, they were in the box on PTC requirements. Lauren McLean said that at the same time Mr. McClure said that they were in the box on PTC requirements her group made it very clear as did DEQ that they were going to use Section 39-105 to do this rulemaking because HB230 changed the box. Mr. McClure said he did not understand that and that is why he testified on HB230 that it changed the box for everybody else but not for them. Ms. McLean said someone asked if Mr. McClure was willing to codify that it did not change the box for them and he said no. Mr. McClure said that is correct. Ms. McLean asked why he did not want to codify it. Mr. McClure said it was because he did not think they needed to codify something they said they would do.

Mr. Bauer said these are the types of discussion that need to take place at the next meeting. The committee needs to go through the issues, take the ideas home, and come back with points to discuss. He added this is exactly the discussion the committee will be having - what vehicle to use. Ms. Kronberg said this will come up whether we agree or not. DEQ knew it when it saw the draft of HB230 and there are some arguments that can be made to take it out of what HB230 intended. Mr. Bauer said he does not know that a PBR does not do that or that a general permit does not do that.

Mr. Bauer stated this rule will not be submitted to EPA as part of a State Implementation Plan. It will be a state-only program because it is not required by the Section 110 program.

ACTION ITEMS

- April 13 meeting was cancelled to give time for various groups to review today's discussions
- Lisa Kronberg will conduct research for examples of general permits; outline pros/cons of structure types and distribute to rulemaking group prior to next meeting
- DEQ will compile a list of potential BMPs; distribute to rulemaking group; dairy associations will review DEQ's BMP list and begin grouping in preparation for next meeting
- Phyllis Heitman will add Dr. Ron Sheffield, University of Idaho, and Bruce Louks, DEQ, to attendee list

NEXT MEETING AND AGENDA

The next meeting is scheduled for May 9, 2005, 9:00 a.m.-5:00 p.m., at the DEQ Office in Twin Falls. Agenda will include discussion of

- Structure
- Best Management Practices: begin discussing individual numerical values and overall value
- Compliance/Inspection